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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,343	08/27/2007	Peter Sajic	M1326.0003/3US	9766
54380	7590	04/28/2011	EXAMINER	
FLASTER/GREENBERG P.C.			SUTTON, ANDREW W	
Four Penn Center				
1600 John F. Kennedy Boulevard			ART UNIT	PAPER NUMBER
2nd Floor				3765
PHILADELPHIA, PA 19103				
NOTIFICATION DATE		DELIVERY MODE		
04/28/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usp@flastergreenberg.com  
kristyne.bullock@flastergreenberg.com  
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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/583,343	SAJIC, PETER	
	<b>Examiner</b>	<b>Art Unit</b>	
	ANDREW W. SUTTON	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 16 February 2011.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 39-57,59-65 and 67-70 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 55-57,59-65 and 67-70 is/are allowed.  
 6) Claim(s) 39-54 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 8/27/07 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>2/16/11</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bothwell (US 3,447,163) in view of Marangoni (US 3,829,900). Bothwell teaches a helmet with an outer 12 and inner surface 13 including an array of energy absorbing shells 18 comprising a tube, where each tube has a sidewall connected to another tube along the length. The tube has axis extending from the outer surface towards the inner surface where the orientation of each tube is maintain when a load is applied to the outer surface. Bothwell does not teach the discrete tubes as claimed. Marangoni teaches a protective helmet with discrete tubes for energy absorption. It would have been obvious to one of ordinary skill in the art to modify the honeycomb of Bothwell with the discrete tubes of Marangoni for better fit.

As to claim 40, the tubes 18 have a cylindrical shape.

As to claim 41, the device is included in a helmet.

Claims 42-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bothwell (US 3,447,163) in view of Marangoni (US 3,829,900) in further view of Dunn (US 5,349,893). Bothwell teaches the device substantially above. Bothwell does not teach the use of adhesives or welding to form the honeycomb. Dunn teaches the use of welding or adhesives to form a honeycomb structure. It would have been obvious to one of ordinary skill to modify the teaching of Bothwell with that of Dunn to provide a more secure honeycomb. (see col. 5 line 31)

As to claim 44, Bothwell teaches a honeycomb made of resin impregnated filled with polyurethane foam.

As to claim 45, the applicant states no criticality to the second material having a lower melting temperature than the first. It would have been obvious to one of ordinary skill in the art to provide the second material having a lower melting point than the first through routine experimentation.

As to claim 46-47, Bothwell illustrates each tube is connected to 6 other tubes.

As to claims 48-49, With respect to the limitation of a 6 mm diameter, the specification contains no disclosure of either the critical nature of the claimed diameter or any unexpected results arising therefrom, and that as such the 6 mm diameter was arbitrary and therefore obvious. Such diameter limitation cannot be a basis for patentability, since where patentability is said to be based upon diameter or another diameter or another variable in the claim, the applicant must show that the 6 mm diameter is critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir.

1990). One having ordinary skill in the art would be able to determine through routine experimentation the ideal dimension for a particular application.

As to claims 50-51, With respect to the limitation of a .1 - .3 mm thickness, the specification contains no disclosure of either the critical nature of the claimed thickness or any unexpected results arising therefrom, and that as such the .1 - .3 mm thickness was arbitrary and therefore obvious. Such thickness limitation cannot be a basis for patentability, since where patentability is said to be based upon diameter or another thickness or another variable in the claim, the applicant must show that the .1 - .3 mm thickness is critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990). One having ordinary skill in the art would be able to determine through routine experimentation the ideal dimension for a particular application.

As to claim 52-53, With respect to the limitation of a 30-40 mm length, the specification contains no disclosure of either the critical nature of the claimed length or any unexpected results arising therefrom, and that as such the 30-40 mm length was arbitrary and therefore obvious. Such length limitation cannot be a basis for patentability, since where patentability is said to be based upon diameter or another length or another variable in the claim, the applicant must show that the 30-40 mm length is critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990). One having ordinary skill in the art would be able to determine through routine experimentation the ideal dimension for a particular application.

As to claim 54, the cells are integral to the helmet.

***Allowable Subject Matter***

Claims 55-57, 59-65, 67-70 are allowed.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW W. SUTTON whose telephone number is (571) 272-6093. The examiner can normally be reached on Monday - Thursday 7:00 am -5:00 pm and Friday 7:00 am - 11:00 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary L. Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AWS  
22 April 2011

/Shaun R Hurley/  
Primary Examiner, Art Unit 3765